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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,443	09/08/2003	John W. Haley	081276-9100-00	1417
34044	7590	12/28/2004	EXAMINER	
MICHAEL BEST & FRIEDRICH LLP 100 EAST WISCONSIN AVENUE MILWAUKEE, WI 53202			BENTON, JASON	
			ART UNIT	PAPER NUMBER

3747

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,443	HALEY ET AL.	
	Examiner	Art Unit	
	Jason Benton	3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-24 and 28-37 is/are rejected.
- 7) ☒ Claim(s) 9 and 25-27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims have negative limitations included.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 15, 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Wakeman.

The patent by Wakeman (6,494,186) shows an intake manifold(10) with an intake passageway (26). A fuel injector (20) is in communication with the intake passageway. At least a portion of the fuel injector is molded into the intake manifold.

A fuel rail (16) is coupled to the fuel injector.

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Claims 1-8, 10-24, and 28-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al.

The patent by Lee et al. (6,769,410) shows an intake manifold (24) with an intake passageway (26). A fuel injector (54) is in communication with the intake passageway, and at least a portion of the fuel injector is molded into the intake manifold.

The intake manifold has a fuel passageway (22) defined therein. The fuel passageway is in communication with the fuel injector. The fuel injector is entirely molded into the intake manifold such that liquid fuel transferred from the fuel passageway to the intake passageway via the fuel injector, and hydrocarbon emissions, are substantially prevented from leaking outside the intake manifold.

A fuel rail (22) defines the fuel passageway, at least a portion of the fuel rail is molded into the intake manifold.

An interface between the fuel rail (22) and the fuel inlet of the fuel injector (54) is molded into the intake manifold.

The fuel injector is coupled to the fuel rail without using a seal adjacent the interface.

The fuel rail includes a fuel rail inlet that extends from the intake manifold (Fig. 1B). The intake manifold includes a middle shell (28), an upper shell coupled to an upper portion of the middle shell, and a lower shell (48) coupled to a lower portion of the middle shell.

The combination of the upper shell and the middle shell defines in part the intake passageway. The fuel injector is at least partially molded into the middle shell.

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An electrical connector (30) is coupled to the fuel injector, the electrical connector being at least partially molded into the intake manifold.

The fuel injector is in communication with the intake passageway to selectively deliver fuel to the intake passageway, the fuel outlet is molded into the intake manifold.

The coupling of the upper shell to the middle shell includes one of welding, bonding, and using snap-fit engagement.

Allowable Subject Matter

Claims 9 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Benton whose telephone number is (571) 272-4838. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JB



Noah P. Kamen
Primary Examiner